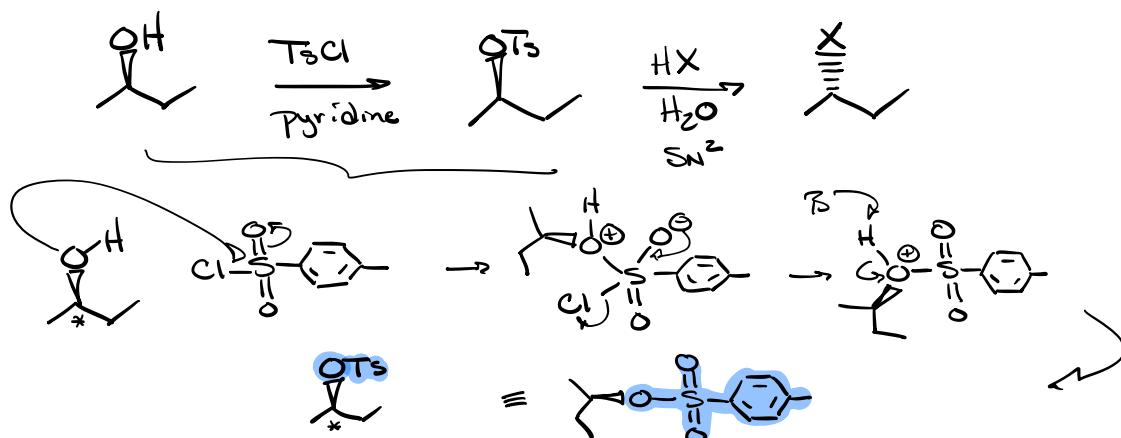
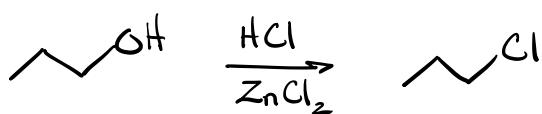
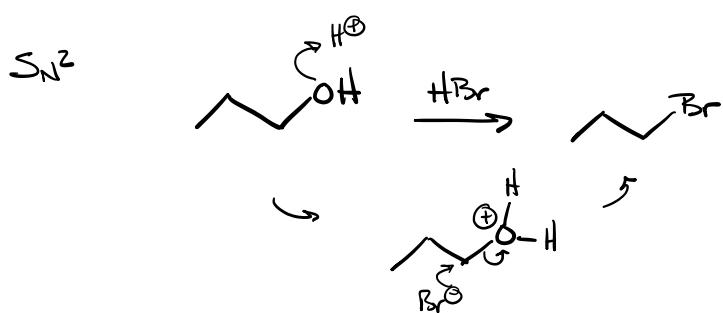
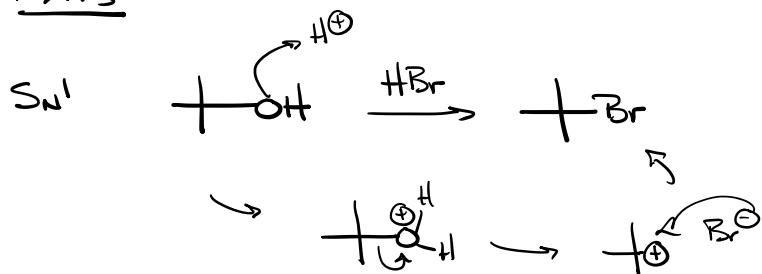


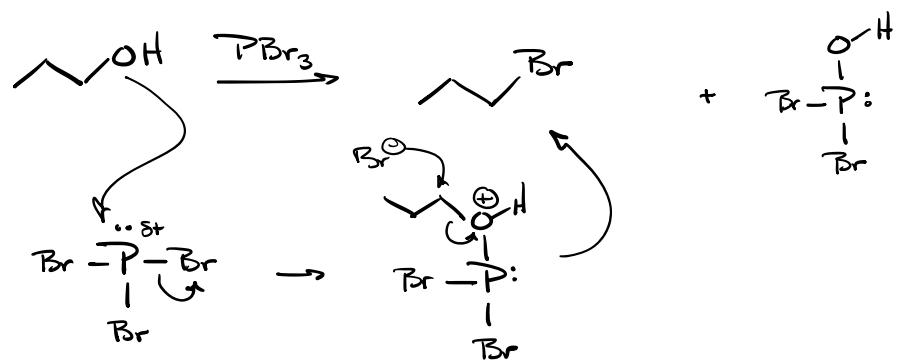
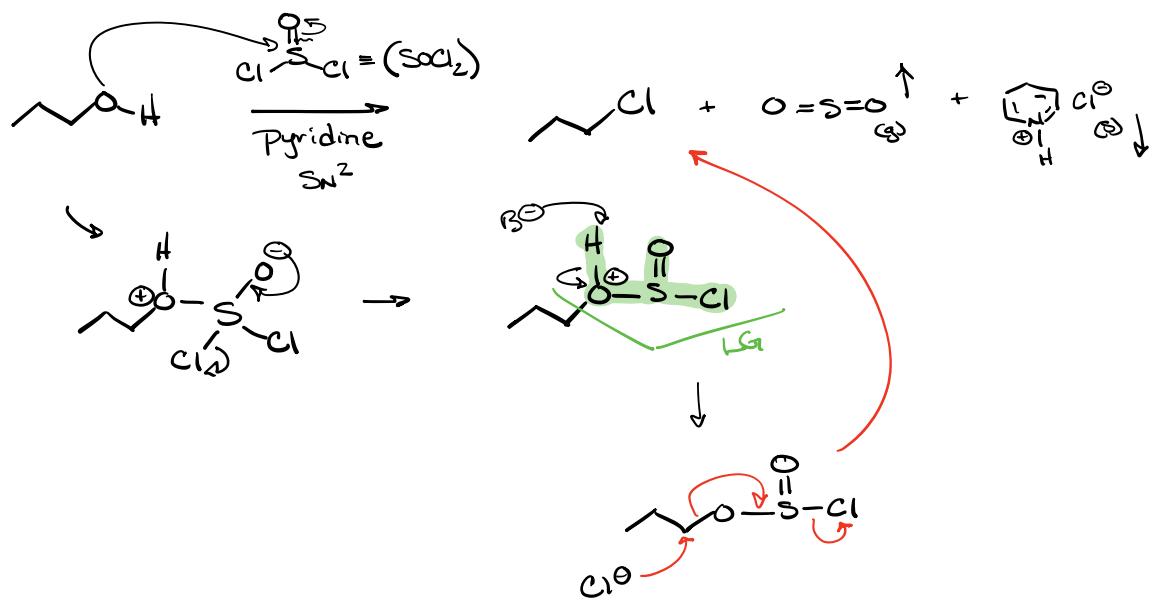
## Alcohols Part 2

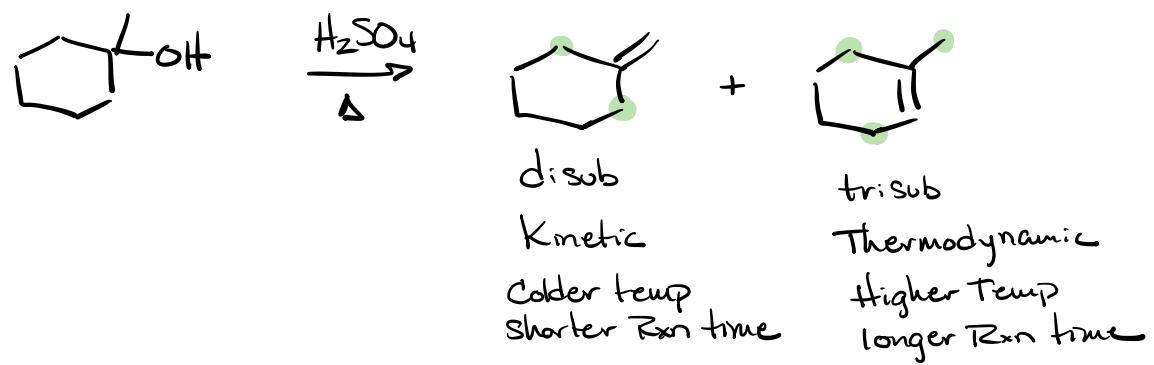
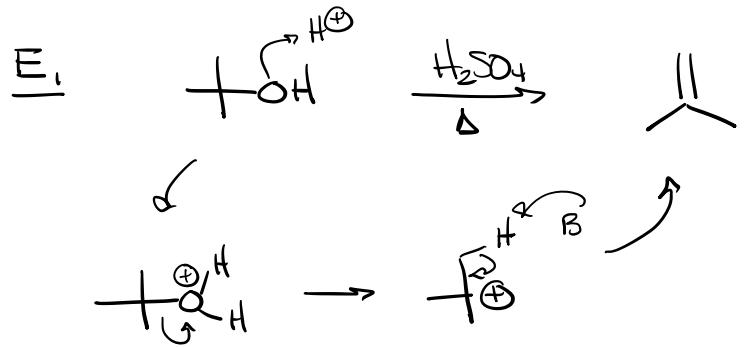
Part 1 → Synthesis of alcohols & diols

Part 2 → Use of alcohols

Rxns



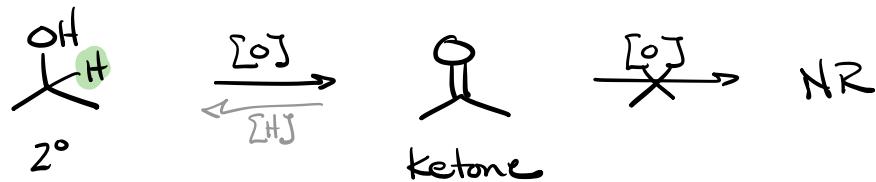
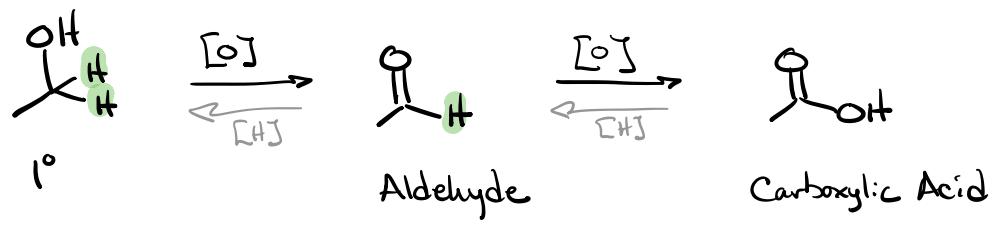




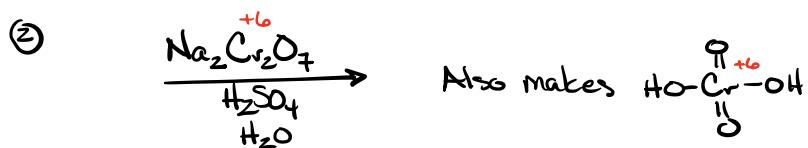
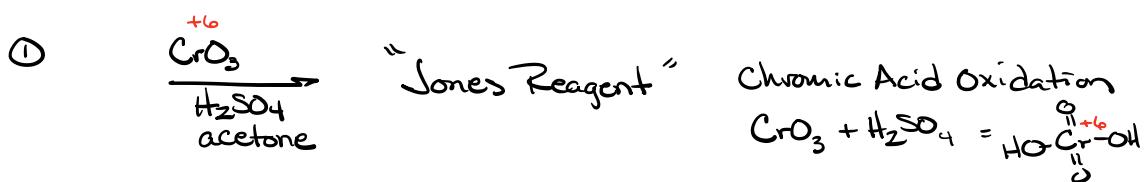
E<sub>2</sub>



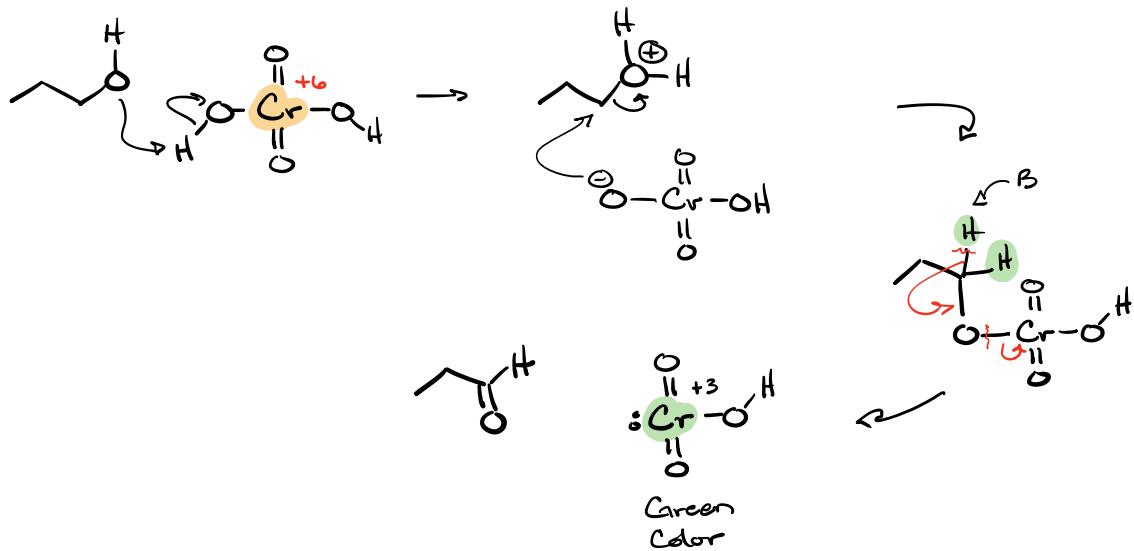
Oxidation — Gain of oxygen or loss of hydrogen  
 Oxidation is Loss (of  $e^-$ )



### Two Strong Oxidizing Reagents



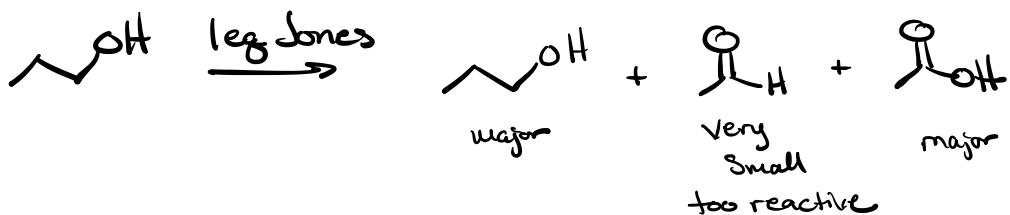
## Mechanism



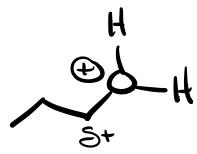
## Problem



$\text{RCH}_2\text{OH} \rightarrow \text{RCHO}$   
Aldehyde is more easily oxidized than  
the starting alcohol

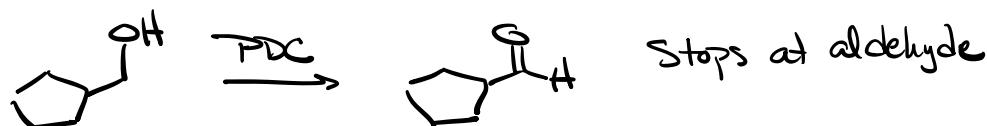
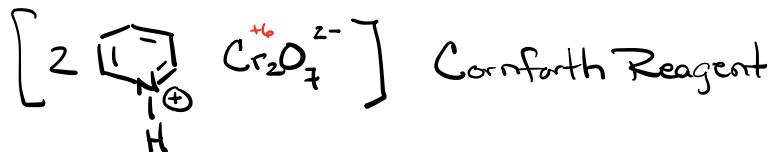
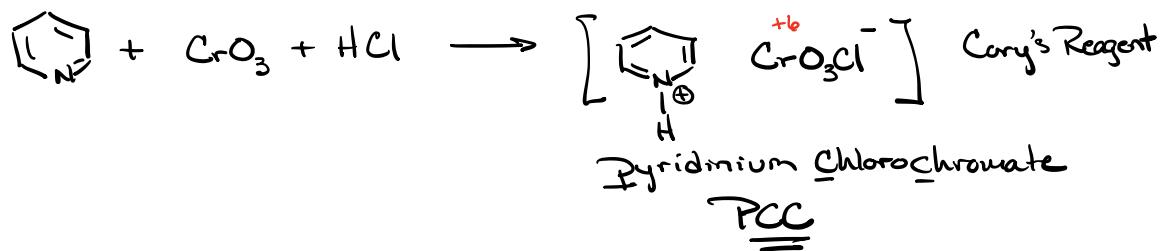


Under Acidic Conditions:



Stronger electrophile

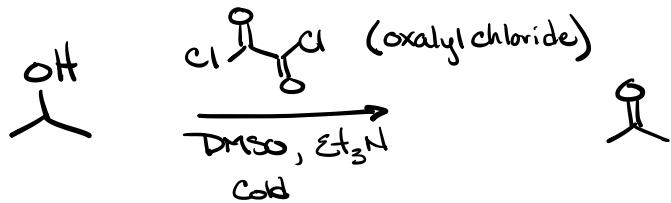
Idea  $\Rightarrow$  Change to basic conditions to prevent protonation!



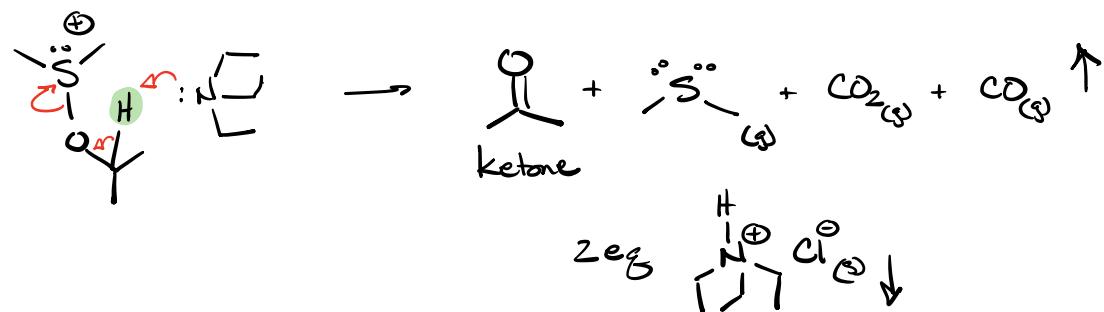
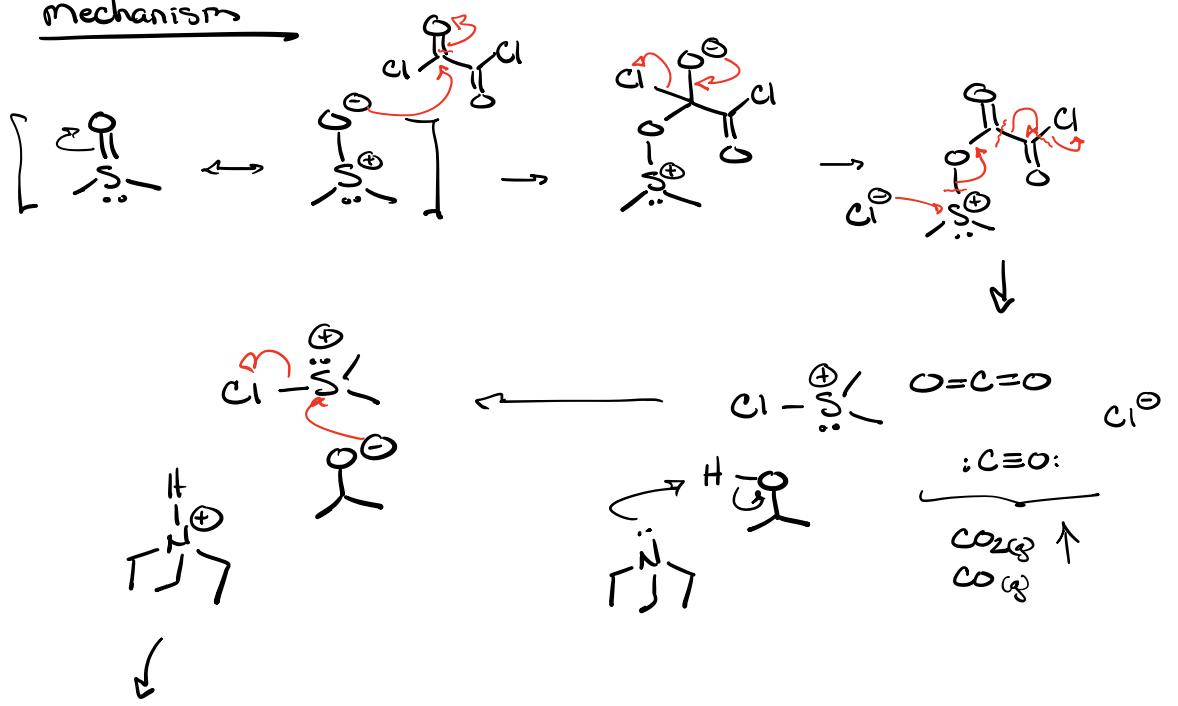
## Swern Oxidation

mild oxidation

Jone's = Strong  
Sledge hammer



### Mechanism



Bio Example

